

### ABSTRACT

A loudspeaker is provided for receiving an incoming electrical signal and transmitting an acoustical signal. The loudspeaker may include a power amplifier that has an input and an output, where the input receives the incoming electrical signal. The loudspeaker may also include two or more passive filters, such as low-pass, band-pass, and/or high-pass filters, which are coupled to the output of the power amplifier. The passive filters may also be coupled to one or more speaker drivers. The arrangement of passive filters and speaker drivers may have a single input that has a combined input impedance. The output of the amplifier may have an output impedance. The output impedance may be between about 25% and about 400% of the combined input impedance. The power amplifier may include a current-feedback amplifier that is configured to maintain the desired output impedance.